T SOUND MONITORING

ACOUSTIC MONITORING SYSTEM
OF CRITICAL INFRASTRUCTURE

AUTOMATIC SOUND ANOMALIES DETECTION

T-Sound Monitor is a supplementary module of T-Multisens Monitoring system. It is designed for a non-stop remote monitoring of potential failure events that can occur during the operation of machines or during the performing of dangerous processes. System quickly identifies undesirable changes of monitored parameters and immediately alerts an operator for a risk situation.

If it is necessary, the module T-Sound Monitoring can be operated also as a stand alone system. It is also ready for a cooperation with third-party control systems.

PREVENTION IS CHEAPER THAN THE **CAUSED DAMAGES**!

T-Sound Monitoring system consist from sound and temperature sensors which non-stop remotely monitoring parameters of critical infrastructure environment, the transmission infrastructure and the central control software, that non-stop evaluates real measured values compared with predefined threshold levels.

Monitoring mode

The monitoring mode is fully automatic and requires no operator presence. During the monitoring mode system displays sound spectrum of live noise from connected remote sound sensors and the temperature value from remote IR sensors.

Automatically detection

In case that the system detects undesirable changes of monitored parameters, it will immediately trigger an alert for the device operator. Actual alarm status of all detectors and sensors is continuously displaying on the central monitor screen, so the operator exactly knows in which place is the risk situation indicated. System will also display what parameter caused the alert.

Combination of T-Sound Monitoring system and T-Multisens Video Management System enables the operator also to watch the picture of corresponding camera. All mentioned information give the operator enough overview of the ongoing situation and help him to make right decision about adequate reaction.

Analysis of probable causes

The captured data (sound and temperature values) from all connected sensors are continuously recorded and archived by central data storage system. T-Sound Monitoring system is also able to perform a post-analysis of recorded sound and temperature values (time trends, replay of records).

The sophisticated post-analyse functions of T-Sound Monitoring system allows the operator to analyze of all recorded data (sound and temperature). In combination with T-Multisens VMS are available also the parallel video recordings. All mentioned information gives the operator enough resources to review the situation history before the risk event. Mentioned information help him determine an exact begining and very often also a probable cause of the event that has occurred.

Sound detector

Remote thermometer (IR)

SOUND & HEAT RELEASE

LATENT PHASE

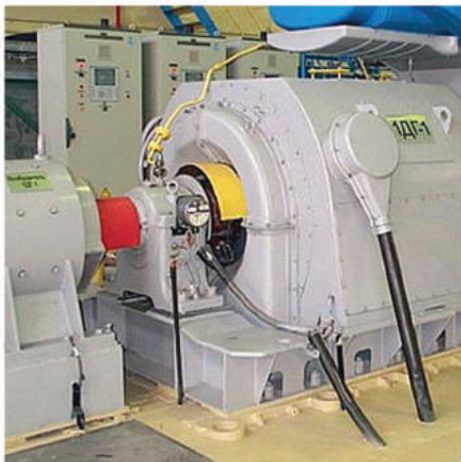GROWING PHASE

FULL DEVELOPMENT PHASE

TIME

Where you can use T-Sound Monitoring

T-Sound Monitoring can be used wherever is a need for early identification of undesirable thermal events which involve a risk of damage to equipment due to its uncontrolled overheating (equipment failure, unpredictable course of a thermal process, etc.).

**REACTORS
STEAM GENERATORS
ARMATURES**

**PUMPS
MOTORS
PIPES**

**SPECIAL
EQUIPMENTS
AND AREAS**